

<b>SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS OFFEROR TO COMPLETE BLOCKS 12, 17, 23, 24, &amp; 30</b>				1. REQUISITION NO. 4200274913		PAGE 1 OF 22	
2. CONTRACT NO.		3. AWARD/EFFECTIVE DATE		4. ORDER NO.		5. SOLICITATION NO. NNS09AA4913R	
6. SOLICITATION ISSUE DATE 1/21/09							
7. FOR SOLICITATION INFORMATION CALL		7a. NAME George Piccolo				7b. TELEPHONE NO. (228) 688-1879	
8. OFFER DUE DATE/LOCAL TIME 2/23/09 15:00 CST							
9. ISSUED BY NASA/Stennis Space Center Office of Procurement/DA10 Building 1100 / Room 251H Stennis Space Center, MS 39529-6000		CODE SSC		10. THIS ACQUISITION IS  <input type="checkbox"/> UNRESTRICTED OR <input checked="" type="checkbox"/> SET ASIDE 100 % FOR <input checked="" type="checkbox"/> SMALL BUSINESS <input type="checkbox"/> HUBZONE SMALL BUS. <input type="checkbox"/> SERVICE-DISABLED VETERAN-OWNED SMALL BUSINESS <input type="checkbox"/> 8(A) <input type="checkbox"/> EMERGING SMALL BUSINESS  NAICS: 332420 SIZE STANDARD: 500			
11. DELIVERY FOR FOB DESTINATION UNLESS BLOCK IS MARKED  <input type="checkbox"/> SEE SCHEDULE		12. DISCOUNT TERMS		13a. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700)  <input type="checkbox"/>		13b. RATING	
						14. METHOD OF SOLICITATION  <input type="checkbox"/> RFQ <input type="checkbox"/> IFB <input checked="" type="checkbox"/> RFP	
15. DELIVER TO NASA/Stennis Space Center Stennis Space Center, MS 39529-6000		CODE SSC		16. ADMINISTERED BY NASA/Stennis Space Center Office of Procurement/DA10 Building 1100 / Room 251H Stennis Space Center, MS 39529-6000			
17a. CONTRACTOR/OFFEROR CODE		FACILITY CODE		18a. PAYMENT WILL BE MADE BY CODE			
				NNSC Shared Services Center Financial Management Division (FMD)-Accounts Payable Bldg 1111, C Road Stennis Space Center MS 39529			
<input type="checkbox"/> 17b. CHECK IF REMITTANCE IS DIFFERENT AND PUT SUCH ADDRESS IN OFFER		18b. SUBMIT INVOICES TO ADDRESS SHOW IN BLOCK 18a UNLESS BLOCK ON RIGHT IS CHECKED  <input type="checkbox"/> SEE ADDENDUM					
19. ITEM NO.	20. SCHEDULE OF SUPPLIES/SERVICES			21. QUANTITY	22. UNIT	23. UNIT PRICE	24. AMOUNT
0001	High Pressure Industrial Water Rubber-Seated Butterfly Valve			1	EA		
25. ACCOUNTING AND APPROPRIATION DATA					26. TOTAL AWARD AMOUNT (Govt. Use Only)		
<input checked="" type="checkbox"/> 27a. SOLICITATION INCORPORATES BY REFERENCE FAR 52.212-1, 52.212-4. FAR 52.212-3 AND 52.212-5 ARE ATTACHED. ADDENDA <input checked="" type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED <input checked="" type="checkbox"/> 27b. CONTRACT/PURCHASE ORDER INCORPORATES BY REFERENCE FAR 52.212-4. FAR 52.212-5 IS ATTACHED. ADDENDA <input checked="" type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED <input checked="" type="checkbox"/> 28. CONTRACTOR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN 3 COPIES TO ISSUING OFFICE. CONTRACTOR AGREES TO FURNISH AND DELIVER ALL ITEMS SET FORTH OR OTHERWISE IDENTIFIED ABOVE AND ON ANY ADDITIONAL SHEETS SUBJECT TO THE TERMS AND CONDITIONS SPECIFIED HEREIN.					<input type="checkbox"/> 29. AWARD OF CONTRACT: REFERENCE OFFER DATED _____ YOUR OFFER ON SOLICITATION (BLOCK 5), INCLUDING ANY ADDITIONS OR CHANGES WHICH ARE SET FORTH HEREIN, IS ACCEPTED AS TO ITEMS:		
30a. SIGNATURE OF OFFEROR/CONTRACTOR					31a. UNITED STATES OF AMERICA (Signature of Contracting Officer)		
30b. NAME AND TITLE OF SIGNER (Type or Print)		30c. DATE SIGNED		31b. NAME OF CONTRACTING OFFICER (Type)		31c. DATE SIGNED	

19. ITEM NO.	20. SCHEDULE OF SUPPLIES/SERVICES	21. QUANTITY	22. UNIT	23. UNIT PRICE	24. AMOUNT

32a. QUANTITY IN COLUMN 21 HAS BEEN

☐ RECEIVED ☐ INSPECTED ☐ ACCEPTED AND CONFORMS TO THE CONTRACT, EXCEPT AS NOTED \_\_\_\_\_

32b. SIGNATURE OF AUTHORIZED GOVT  
REPRESENTATIVE

32c. DATE

32d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT  
REPRESENTATIVE

32e. MAILING ADDRESS OF AUTHORIZED GOVT. REPRESENTATIVE

32f. TELEPHONE NO. OF AUTHORIZED GOV'T REPRESENTATIVE

32g. EMAIL OF AUTHORIZED GOVERNMENT REPRESENTATIVE

33. SHIP NO.

34. VOUCHER NO.

35. AMOUNT VERIFIED  
CORRECT FOR

36. PAYMENT

37. CHECK NO.

☐ PARTIAL ☐ FINAL

☐ COMPLETE ☐ PARTIAL ☐ FINAL

38. S/R/ACCOUNT NO.

39. VOUCHER NO.

40. PAID BY

41a. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT

42a. RECEIVED BY (Print)

41b. SIGNATURE AND TITLE OF CERTIFYING OFFICER

41c. DATE

42b. RECEIVED AT (Location)

42c. DATE REC'D

42d. TOTAL CONTAINERS

BACK

Standard Form 1449 (REV. 3/2005)

**Statement of Work:**

**Item 0001:** The work to be performed under this project consists of the design, fabrication, inspection, testing and delivery to Stennis Space Center, of a 96" 300 psig water rubber-seated butterfly valve ASTM A395 or ASTM A536 ductile iron (or an approved equal). Quantity is one (1) each.

The valve shall comply with the codes referenced and shall be suitable for both the flow and holding of water as described within Procurement Specification for High Pressure Industrial Water Rubber Seated Butterfly Valves Number 11J00-GM04, Rev. 2 (attached).

**Ship To:** All requirements herein shall be delivered to the following address **FOB Destination:**

John C. Stennis Space Center  
Deliver to HPIW Building (BLDG 4400) for inspection and receipt.  
Standard Inspection is required.  
Stennis Space Center, MS 39529-6000  
Attn: Stan Warren (228-688-7111)

**Period of Performance:** All deliveries shall be completed within 270 days from the effective date of contract award.

**Contract Completion** This contract shall be considered complete when all items have been delivered and accepted by designated SSC personnel.

**52.212-1 – INSTRUCTIONS TO OFFERORS – COMMERCIAL ITEMS (Jun 2008)**

The following **ADDENDA TO FAR 52.212-1** are incorporated:

**ADDENDUM TO 52.212-1 – INSTRUCTIONS TO OFFERORS – COMMERCIAL ITEMS**

The following paragraph of this clause is tailored as follows:

(c) *Period for acceptance of offers.* Replace with the following: *Period for acceptance of offers.* The offeror agrees to hold the prices in its offer firm for **60** calendar days from the date specified for receipt of offers.

**INSTRUCTIONS REGARDING SUBMISSION OF OFFER:**

The following information is to be provided with offeror's proposal. The information requested must be provided for the prime contractor, and, if applicable, significant subcontractors.

\*\*\*Failure to provide any item requested below may render offeror's proposal NON-RESPONSIVE and thereby ineligible for award.\*\*\*

**(A) TECHNICAL COMPLIANCE**

1. Information provided shall include a discussion of the offeror's approach to meeting the requirements of the solicitation and should be specific, detailed, and complete enough to clearly and fully demonstrate an understanding of the requirements and any risks associated with the objectives of this procurement. It is inadequate to simply state that offeror understands and will comply with the requirements, or to paraphrase the requirements such as: "standard procedures will be employed to..." and "well-known techniques will be used for..." The information provided shall comprehensively explain how offeror proposes to comply with the

applicable Statement of Work/Specifications/Drawings, as well as, the techniques and procedures offeror intends to utilize. At a minimum, supportive documentation shall address machining and other fabrication, quality control, welding, welding inspection, assembly, cleaning, testing and post delivery inspection.

2. Technical proposals should include, at a minimum:

a. Offer shall provide preliminary dimensional drawing(s) of Valve configuration depicting size, type of fabrication.

b. Offeror shall identify all manufacturer's ASME certification.

(B) SCHEDULE

1. Schedule milestone table or chart shall be provided to show, at a minimum, start and completion of design, material procurement(s), fabrication.

2. Offeror shall provide documentation sufficient to demonstrate the ability to develop fabrication drawings, procure material, fabricate and ship the assembly by the required delivery date. The number of shipping days and method should be included in the schedule.

(C) PAST PERFORMANCE

1. Past Performance Information (PPI) and Relevant Experience Information shall include the name(s) and contact information for the three (3) most recent (within three years from the offer due date listed on page 1 in Block 8 of the SF1449) and relevant (as outlined in the Federal Acquisition Regulation/FAR) references (whether federal, state, or local government or private industry) for the prime contractor, and, if applicable, significant subcontractors. Failure to provide adequate contact information shall result in the offeror being given a "neutral" rating.

2. Offerors should identify any sub-contractors who will perform the valve design and fabrication.

3. Offerors should provide a listing of verifiable experience in fabricating 96" 300 psig water rubber-seated butterfly valve ASTM A395 or ASTM A536 ductile iron (or an approved equal).

4. Offeror shall provide documentation demonstrating years of experience by the manufacturer in design and manufacture of components and assemblies of similar design. Qualification name, phone number and address are required. Documentation shall include a list of parts and assemblies fabricated, size, location of use, service, and date of manufacture. A minimum of 3 years of experience is required.

(E) PRICE

1. This procurement is exempt from the requirements of submission or certification of cost or pricing data. However, offeror is to provide a general breakdown of pricing (i.e. labor, equipment, materials, subcontracts, transportation, etc.) sufficient to determine price reasonableness. Should significant subcontractors be involved, the pricing breakdown shall identify the pricing associated with each subcontractor.

2. Offeror shall identify and document all (if any) assumptions, conditions, and/or exceptions upon which the price is based. Any assumptions, conditions, and/or exceptions considered by the Government to be unacceptable may result in elimination for an award.

(F) FORMAT

1. Proposals shall be clear and concise, and shall include sufficient detail for effective evaluation and substantiation of stated claims. The proposal shall not simply affirm, rephrase, or restate the Government's requirements, but rather shall provide convincing rationale to address how the offeror intends to meet the

requirements. Offerors shall assume that the Government has no prior knowledge of their facilities and experience, and will base its evaluation only on the information presented in the offeror's proposal. Elaborate brochures or documentation, detailed artwork, or other superfluous embellishments are unnecessary and are not desired.

2. If a joint venture, subcontracting arrangement, or any other type of contractual arrangement is proposed, proposal shall clearly delineate the approach for overall management and integration of this teaming arrangement. Offeror shall describe the operational and management interfaces (including all levels of supervision and management) for interacting with subcontractors, other contractors, NASA, etc. and why they will be effective in accomplishing the requirement.

3. All information and all copies of offer must be submitted no later than the date and time specified on Page 1 in Block 8 of the SF 1449. Proposals that arrive after the prescribed date and time specified for receipt of proposals will be considered late and treated in accordance with FAR 52.212-1(f)(2).

4. Signed offer(s) shall be submitted in hard copy only.

(G) QUESTIONS - Questions regarding the solicitation and/or Statement of Work/Specifications/Drawings are encouraged to ensure adequate understanding of the government's requirement. All offeror questions regarding subject solicitation must be submitted no later than 3pm local time (Central) on **February 4, 2009**. Questions submitted after this date/time will not be accepted. Questions will be accepted via e-mail only to: george.r.piccolo@nasa.gov (cc: james.d.huk@nasa.gov). Faxed or telephoned questions will not be accepted. In no event shall an offeror's failure to clarify the requirements of the solicitation constitute grounds for a protest before or after award or a claim after contract award.

(H) PROPOSAL COSTS - The Government will not pay any offeror for preparation of their proposal.

(I) TECHNICAL EVALUATION CONTRACTOR SUPPORT

1. Offerors are hereby informed that the John C. Stennis Space Center (SSC) onsite Test Operations Contractor(s) will be providing technical assistance to the NASA proposal evaluation team, and, as such, will require access to offeror's proposal. The onsite SSC Test Operations Contractor(s) **will not be** evaluating proposals, but will play an integral supporting role in the technical evaluation by providing technical input to be used by the NASA evaluation team. **The final technical evaluation results shall be the responsibility of the NASA Technical Evaluation Team.**

2. By submitting an offer in response to this solicitation, offeror acknowledges approval and acceptance of technical assistance approach as identified above.

**52.212-2 EVALUATION--COMMERCIAL ITEMS (Jan 1999)**

(a) The Government will award a contract resulting from this solicitation to the responsible offeror whose offer, conforming to the solicitation, will be most advantageous to the Government, price and other factors considered. The following factors shall be used to evaluate offers: technical compliance, schedule, past performance, and price. Technical compliance and schedule, when combined, are significantly more important than past performance or price.

(b) Options. N/A

(c) A written notice of award or acceptance of an offer, mailed or otherwise furnished to the successful offeror within the time for acceptance specified in the offer, shall result in a binding contract without further action by either party. Before the offer's specified expiration time, the Government may accept an offer (or part of an offer), whether or not there are negotiations after its receipt, unless a written notice of withdrawal is received before award.

The following **ADDENDUM TO FAR 52.212-2** is incorporated:

**(A) COMPETITIVE NEGOTIATED PROCUREMENT USING QUALITATIVE CRITERIA**

This procurement is being conducted utilizing Best Value Selection (BVS), which seeks to make an award based on the best combination of price and qualitative merit (including Technical Compliance, past performance, schedule, and price) of the proposals submitted and reduce the administrative burden on Offerors and the Government. BVS predefines the value characteristics which will serve as discriminators among proposals. BVS evaluation is based on the premise that, if all proposals are of approximately equal qualitative merit, award will be made to the Offeror with the lowest evaluated price (fixed-price contracts) or the lowest most probable cost (cost type contracts). However, the Government will consider awarding to an Offeror with higher qualitative merit if the difference in price is commensurate with added value. Conversely, the Government will consider making award to an Offeror whose quote has lower qualitative merit if the price (or cost) differential between it and other offers warrants doing so.

**(B) EVALUATION CRITERIA**

a. The award will be made where the offeror is determined to be responsible, and the proposal is responsive and offers the best value to the government. Best value will be determined based on an integrated assessment of each proposal in terms of Technical Compliance, Schedule, Past Performance, and Price. Therefore, subjective judgment by the government is implicit in the evaluation process. **Technical Compliance, Schedule, and Past Performance when combined, are more important than Price.** If offeror does not have relevant past performance history, the offeror may not be evaluated favorably or unfavorably on past performance and will be given a neutral rating as detailed in this plan. In addition, award may be made without conducting discussions.

b. Once all responses have been gathered, proposals will be qualitatively evaluated by team members using the below value characteristics. These value characteristics are performance-based and permit evaluation of the proposal, which provides better results for a reasonable marginal increase in price. All proposals will be judged against these value characteristics.

**(C) EVALUATION PROCESS**

The Government will evaluate proposals in two general steps:

**Step One** -- An initial evaluation will be performed to determine if all required information has been provided and the Offeror has presented a responsive proposal. Offeror may be contacted only for clarification purposes during the initial evaluation. Should a proposal be determined nonresponsive, the offeror shall be notified that their proposal has been rejected and the reasons therefore, and the proposal shall be excluded from further consideration.

Otherwise responsive proposals containing a significant variance in price from the government's estimate may be immediately removed from further consideration if there is no expectation that an award can be made at a fair and reasonable price, as it would be detrimental to the public interest to pay more than fair market price.

**Step Two** -- All responsive proposals will be evaluated against the Statement of Work/Specifications/Drawings and the value characteristics identified herein. Based on this evaluation, the Government has the option, depending on the specific circumstances of the proposals received, to utilize one of the following methods: **(1)** Make selection and award without discussions, or **(2)** after establishment of the competitive range, hold discussions with all finalists and afford each Offeror an opportunity to revise its proposal, and then make selection based upon an evaluation of the revised proposals.

Offerors are cautioned that omissions or an inaccurate or inadequate response to these evaluation factors may have a negative effect on your overall evaluation.

References other than those provided by the offeror may be contacted and their comments considered during the evaluation process. The information submitted may be verified by the Government through discussions with the references provided. While the Government may elect to consider data obtained from other sources, the burden of providing relevant references that the Government can readily contact rests with the Offeror.

#### (D) VALUE CHARACTERISTICS

Listed below are the value characteristics that will be utilized in the evaluation of each proposal. Each value characteristic is further defined to explain the rating that each offeror will receive. Documentation insufficient to make a definitive determination regarding these characteristics may negatively impact the score received.

- a) Technical Compliance 50% - The government will evaluate the information provided by the offeror in response to this solicitation as well as to what extent proposal is in compliance with required Statement of Work/Specifications/Drawings and the reasonableness of the proposed approach.
- b) Schedule 20% - The government will evaluate to what extent proposed schedule meets the government's needs as specified in the solicitation as well as the reasonableness of the schedule proposed.
- c) Past Performance 30% - The government will evaluate past and present performance, giving consideration to the relevance of the work performed and the quality of performance indicated, to anticipate the likelihood of successful performance.
- e) Price - The government will evaluate offeror's proposed price for reasonableness and for determining best value to the Government.

#### **52.212-3 OFFEROR REPRESENTATIONS AND CERTIFICATIONS - COMMERCIAL ITEMS (Jun 2008) Alternate I (Apr 2002).**

**An offeror shall complete only paragraph (b) of this provision if the offeror has completed the annual representations and certificates electronically at <http://orca.bpn.gov> . If an offeror has not completed the annual representations and certifications electronically at the ORCA website, the offeror shall complete only paragraphs (c) through (m) of this provision.**

(a) *Definitions.* As used in this provision -

“Emerging small business” means a small business concern whose size is no greater than 50 percent of the numerical size standard for the NAICS code designated.

“Forced or indentured child labor” means all work or service-

- (1) Exacted from any person under the age of 18 under the menace of any penalty for its nonperformance and for which the worker does not offer himself voluntarily; or
- (2) Performed by any person under the age of 18 pursuant to a contract the enforcement of which can be accomplished by process or penalties.

“Manufactured end product” means any end product in Federal Supply Classes (FSC) 1000-9999, except-

- (1) FSC 5510, Lumber and Related Basic Wood Materials;
- (2) Federal Supply Group (FSG) 87, Agricultural Supplies;
- (3) FSG 88, Live Animals;
- (4) FSG 89, Food and Related Consumables;
- (5) FSC 9410, Crude Grades of Plant Materials;
- (6) FSC 9430, Miscellaneous Crude Animal Products, Inedible;
- (7) FSC 9440, Miscellaneous Crude Agricultural and Forestry Products;
- (8) FSC 9610, Ores;
- (9) FSC 9620, Minerals, Natural and Synthetic; and
- (10) FSC 9630, Additive Metal Materials.

“Place of manufacture” means the place where an end product is assembled out of components, or otherwise made or processed from raw materials into the finished product that is to be provided to the Government. If a product is disassembled and reassembled, the place of reassembly is not the place of manufacture.

“Restricted business operations” means business operations in Sudan that include power production activities, mineral extraction activities, oil-related activities, or the production of military equipment, as those terms are defined in the Sudan Accountability and Divestment Act of 2007 (Pub. L. 110-174). Restricted business operations do not include business operations that the person conducting the business can demonstrate-

- (1) Are conducted under contract directly and exclusively with the regional government of southern Sudan;
- (2) Are conducted pursuant to specific authorization from the Office of Foreign Assets Control in the Department of the Treasury, or are expressly exempted under Federal law from the requirement to be conducted under such authorization;
- (3) Consist of providing goods or services to marginalized populations of Sudan;
- (4) Consist of providing goods or services to an internationally recognized peacekeeping force or humanitarian organization;
- (5) Consist of providing goods or services that are used only to promote health or education; or
- (6) Have been voluntarily suspended.

“Service-disabled veteran-owned small business concern”-

- (1) Means a small business concern-
  - (i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and
  - (ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a service-disabled veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.
- (2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

“Small business concern” means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR Part 121 and size standards in this solicitation.

“Veteran-owned small business concern” means a small business concern-

- (1) Not less than 51 percent of which is owned by one or more veterans(as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and
- (2) The management and daily business operations of which are controlled by one or more veterans.



“Women-owned business concern” means a concern which is at least 51 percent owned by one or more women; or in the case of any publicly owned business, at least 51 percent of the its stock is owned by one or more women; and whose management and daily business operations are controlled by one or more women.

“Women-owned small business concern” means a small business concern --

(1) That is at least 51 percent owned by one or more women or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.

(b)(1) *Annual Representations and Certifications.* Any changes provided by the offeror in paragraph (b)(2) of this provision do not automatically change the representations and certifications posted on the Online Representations and Certifications Application (ORCA) website.

(2) The offeror has completed the annual representations and certifications electronically via the ORCA website at <http://orca.bpn.gov>. After reviewing the ORCA database information, the offeror verifies by submission of this offer that the representations and certifications currently posted electronically at FAR 52.212-3, Offeror Representations and Certifications-Commercial Items, have been entered or updated in the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR 4.1201), except for paragraphs \_\_\_\_\_.

*[Offeror to identify the applicable paragraphs at (c) through (m) of this provision that the offeror has completed for the purposes of this solicitation only, if any.]*

*These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.*

*Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on ORCA.]*

(c) Offerors must complete the following representations when the resulting contract will be performed in the United States or its outlying areas. **Check all that apply.**

(1) *Small business concern.* The offeror represents as part of its offer that it ☐ is, ☐ is not a small business concern.

(2) *Veteran-owned small business concern.* *[Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.]* The offeror represents as part of its offer that it ☐ is, ☐ is not a veteran-owned small business concern.

(3) *Service-disabled veteran-owned small business concern.* *[Complete only if the offeror represented itself as a veteran-owned small business concern in paragraph (c)(2) of this provision.]* The offeror represents as part of its offer that it ☐ is, ☐ is not a service-disabled veteran-owned small business concern.

(4) *Small disadvantaged business concern.* *[Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.]* The offeror represents, for general statistical purposes, that it ☐ is, ☐ is not, a small disadvantaged business concern as defined in 13 CFR 124.1002.

(5) *Women-owned small business concern.* *[Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.]* The offeror represents that it ☐ is, ☐ is not a women-owned small business concern.

Note: Complete paragraphs (c)(6) and (c)(7) only if this solicitation is expected to exceed the simplified acquisition threshold.

(6) *Women-owned business concern (other than small business concern).* *[Complete only if the offeror is a women-owned business concern and did not represent itself as a small business concern in paragraph (c)(1) of this provision.]* The offeror represents that it ☐ is, a women-owned business concern.

(7) *Tie bid priority for labor surplus area concerns.* If this is an invitation for bid, small business offerors may identify the labor surplus areas in which costs to be incurred on account of manufacturing or production (by offeror or first-tier subcontractors) amount to more than 50 percent of the contract price: N/A

(8) Small Business Size for the Small Business Competitiveness Demonstration Program and for the Targeted Industry Categories under the Small Business Competitiveness Demonstration Program. *[Complete only if the offeror has represented itself to be a small business concern under the size standards for this solicitation.]*

(i) *[Complete only for solicitations indicated in an addendum as being set-aside for emerging small businesses in one of the designated industry groups (DIGs).]* The offeror represents as part of its offer that it ☐ is, ☐ is not an emerging small business.

(ii) *[Complete only for solicitations indicated in an addendum as being for one of the targeted industry categories (TICs) or designated industry groups (DIGs).]* Offeror represents as follows:

(A) Offeror's number of employees for the past 12 months (check the Employees column if size standard stated in the solicitation is expressed in terms of number of employees); **or**

(B) Offeror's average annual gross revenue for the last 3 fiscal years (check the Average Annual Gross Number of Revenues column if size standard stated in the solicitation is expressed in terms of annual receipts). *(Check one of the following):*

<u>Number of Employees</u>	<u>Average Annual Gross Revenues</u>
<input type="checkbox"/> 50 or fewer	<input type="checkbox"/> \$1 million or less
<input type="checkbox"/> 51-100	<input type="checkbox"/> \$1,000,001-\$2 million
<input type="checkbox"/> 101-250	<input type="checkbox"/> \$2,000,001-\$3.5 million
<input type="checkbox"/> 251-500	<input type="checkbox"/> \$3,500,001-\$5 million
<input type="checkbox"/> 501-750	<input type="checkbox"/> \$5,000,001-\$10 million
<input type="checkbox"/> 751-1,000	<input type="checkbox"/> \$10,000,001-\$17 million
<input type="checkbox"/> Over 1,000	<input type="checkbox"/> Over \$17 million

(9) *[Complete only if the solicitation contains the clause at FAR 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns, or FAR 52.219-25, Small Disadvantaged Business Participation Program-Disadvantaged Status and Reporting, and the offeror desires a benefit based on its disadvantaged status.]*

(i) *General.* The offeror represents that **either-**

(A) It ☐ is, ☐ is not certified by the Small Business Administration as a small disadvantaged business concern and identified, on the date of this representation, as a certified small disadvantaged business concern in the database maintained by the Small Business Administration (PRO-Net), and that no material change in disadvantaged ownership and control has occurred since its certification, and, where the concern is owned by one or more individuals claiming disadvantaged status, the net worth of each individual upon whom the certification is based does not exceed \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); **or**

(B) It ☐ has, ☐ has not submitted a completed application to the Small Business Administration or a Private Certifier to be certified as a small disadvantaged business concern in accordance with 13 CFR 124, Subpart B, and a decision on that application is pending, and that no material change in disadvantaged ownership and control has occurred since its application was submitted.

(ii) *Joint Ventures under the Price Evaluation Adjustment for Small Disadvantaged Business Concerns.* The offeror represents, as part of its offer, that it is a joint venture that complies with the requirements in 13 CFR 124.1002(f) and that the representation in paragraph (c)(9)(i) of this provision is accurate for the small disadvantaged business concern that is participating in the joint venture. *[The offeror shall enter the name of the small disadvantaged business concern that is participating in the joint venture:]*

(10) *HUBZone small business concern.* *[Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.]* The offeror represents, as part of its offer, that--

(i) It ☐ is, ☐ is not a HUBZone small business concern listed, on the date of this representation, on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration, and no material

change in ownership and control, principal office, or HUBZone employee percentage has occurred since it was certified by the Small Business Administration in accordance with 13 CFR part 126; **and**

(ii) It ☐ is, ☐ not a joint venture that complies with the requirements of 13 CFR part 126, and the representation in paragraph (c)(10)(i) of this provision is accurate for the HUBZone small business concern or concerns that are participating in the joint venture. [*The offeror shall enter the name or names of the HUBZone small business concern or concerns that are participating in the joint venture: \_\_\_\_\_.*] Each HUBZone small business concern participating in the joint venture shall submit a separate signed copy of the HUBZone representation.

(11) (Complete if the offeror has represented itself as disadvantaged in paragraph (c)(4) or (c)(9) of this provision.) [The offeror shall check the category in which its ownership falls]:

☐ Black American.

☐ Hispanic American.

☐ Native American (American Indians, Eskimos, Aleuts, or Native Hawaiians).

☐ Asian-Pacific American (persons with origins from Burma, Thailand, Malaysia, Indonesia, Singapore, Brunei, Japan, China, Taiwan, Laos, Cambodia (Kampuchea), Vietnam, Korea, The Philippines, U.S. Trust Territory or the Pacific Islands (Republic of Palau), Republic of the Marshall Islands, Federated States of Micronesia, the Commonwealth of the Northern Mariana Islands, Guam, Samoa, Macao, Hong Kong, Fiji, Tonga, Kiribati, Tuvalu, or Nauru).

☐ Subcontinent Asian (Asian-Indian) American (persons with origins from India, Pakistan, Bangladesh, Sri Lanka, Bhutan, the Maldives Islands, or Nepal).

☐ Individual/concern, other than one of the preceding.

*(d) Representations required to implement provisions of Executive Order 11246 --*

(1) Previous contracts and compliance. The offeror represents that --

(i) It ☐ has, ☐ has not, participated in a previous contract or subcontract subject to the Equal Opportunity clause of this solicitation; **and**

(ii) It ☐ has, ☐ has not, filed all required compliance reports.

(2) *Affirmative Action Compliance.* The offeror represents that --

(i) It ☐ has developed and has on file, ☐ has not developed and does not have on file, at each establishment, affirmative action programs required by rules and regulations of the Secretary of Labor (41 CFR parts 60-1 and 60-2), **or**

(ii) It ☐ has not previously had contracts subject to the written affirmative action programs requirement of the rules and regulations of the Secretary of Labor.

(e) *Certification Regarding Payments to Influence Federal Transactions (31 U.S.C. 1352).* (Applies only if the contract is expected to exceed \$100,000.) By submission of its offer, the offeror certifies to the best of its knowledge and belief that no Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress on his or her behalf in connection with the award of any resultant contract. If any registrants under the Lobbying Disclosure Act of 1995 have made a lobbying contact on behalf of the offeror with respect to this contract, the offeror shall complete and submit, with its offer, OMB Standard Form LLL, Disclosure of Lobbying Activities, to provide the name of the registrants. The offeror need not report regularly employed officers or employees of the offeror to whom payments of reasonable compensation were made.

(f) *Buy American Act Certificate.* (Applies only if the clause at Federal Acquisition Regulation (FAR) 52.225-1, Buy American Act – Supplies, is included in this solicitation.)

(1) The offeror certifies that each end product, except those listed in paragraph (f)(2) of this provision, is a domestic end product and that the offeror has considered components of unknown origin to have been mined, produced, or manufactured outside the United States. The offeror shall list as foreign end products those end products manufactured in the United States that do not qualify as domestic end products. The terms “component,”

“domestic end product,” “end product,” “foreign end product,” and “United States” are defined in the clause of this solicitation entitled “Buy American Act-Supplies.”

(2) Foreign End Products:

LINE ITEM NO.	COUNTRY OF ORIGIN
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*[List as necessary]*

(3) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25.

(g)

(1) *Buy American Act -- Free Trade Agreements -- Israeli Trade Act Certificate*. (Applies only if the clause at FAR 52.225-3, Buy American Act -- Free Trade Agreements -- Israeli Trade Act, is included in this solicitation.)

(i) The offeror certifies that each end product, except those listed in paragraph (g)(1)(ii) or (g)(1)(iii) of this provision, is a domestic end product and that the offeror has considered components of unknown origin to have been mined, produced, or manufactured outside the United States. The terms “Bahrainian or Moroccan end product,” “component,” “domestic end product,” “end product,” “foreign end product,” “Free Trade Agreement country,” “Free Trade Agreement country end product,” “Israeli end product,” and “United States” are defined in the clause of this solicitation entitled “Buy American Act-Free Trade Agreements-Israeli Trade Act.”

(ii) The offeror certifies that the following supplies are Free Trade Agreement country end products (other than Bahrainian or Moroccan end products) or Israeli end products as defined in the clause of this solicitation entitled “Buy American Act-Free Trade Agreements-Israeli Trade Act”:

Free Trade Agreement Country End Products (Other than Bahrainian or Moroccan End Products) or Israeli End Products:

LINE ITEM NO.	COUNTRY OF ORIGIN
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*[List as necessary]*

(iii) The offeror shall list those supplies that are foreign end products (other than those listed in paragraph (g)(1)(ii) or this provision) as defined in the clause of this solicitation entitled “Buy American Act-Free Trade Agreements-Israeli Trade Act.” The offeror shall list as other foreign end products those end products manufactured in the United States that do not qualify as domestic end products.

Other Foreign End Products:

LINE ITEM NO.	COUNTRY OF ORIGIN
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*[List as necessary]*

(iv) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25.

(2) *Buy American Act-Free Trade Agreements-Israeli Trade Act Certificate, Alternate I*. If Alternate I to the clause at FAR 52.225-3 is included in this solicitation, substitute the following paragraph (g)(1)(ii) for paragraph (g)(1)(ii) of the basic provision:

(g)(1)(ii) The offeror certifies that the following supplies are Canadian end products as defined in the clause of this solicitation entitled “Buy American Act-Free Trade Agreements-Israeli Trade Act”:

Canadian End Products:

Line Item No.:

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*[List as necessary]*

(3) *Buy American Act-Free Trade Agreements-Israeli Trade Act Certificate, Alternate II*. If Alternate II to the clause at FAR 52.225-3 is included in this solicitation, substitute the following paragraph (g)(1)(ii) for paragraph (g)(1)(ii) of the basic provision:

(g)(1)(ii) The offeror certifies that the following supplies are Canadian end products or Israeli end products as defined in the clause of this solicitation entitled ``Buy American Act--Free Trade Agreements--Israeli Trade Act":

Canadian or Israeli End Products:

LINE ITEM NO.	COUNTRY OF ORIGIN
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[List as necessary]

(4) *Trade Agreements Certificate*. (Applies only if the clause at FAR 52.225-5, Trade Agreements, is included in this solicitation.)

(i) The offeror certifies that each end product, except those listed in paragraph (g)(4)(ii) of this provision, is a U.S.-made or designated country end product, as defined in the clause of this solicitation entitled "Trade Agreements."

(ii) The offeror shall list as other end products those end products that are not U.S.-made or designated country end products.

Other End Products

LINE ITEM NO.	COUNTRY OF ORIGIN
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[List as necessary]

(iii) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25. For line items subject to the WTO GPA, the Government will evaluate offers of U.S.-made or designated country end products without regard to the restrictions of the Buy American Act. The Government will consider for award only offers of U.S.-made or designated country end products unless the Contracting Officer determines that there are no offers for such products or that the offers for such products are insufficient to fulfill the requirements of the solicitation.

(h) *Certification Regarding Responsibility Matters (Executive Order 12689)*. (Applies only if the contract value is expected to exceed the simplified acquisition threshold.) The offeror certifies, to the best of its knowledge and belief, that the offeror and/or any of its principals--

(1) ☐ Are, ☐ are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;

(2) ☐ Have, ☐ have not, within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a Federal, state or local government contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, violating Federal criminal tax laws, or receiving stolen property;

(3) ☐ Are, ☐ are not presently indicted for, or otherwise criminally or civilly charged by a Government entity with, commission of any of these offenses enumerated in paragraph (h)(2) of this clause; and

(4) ☐ Have, ☐ have not, within a three-year period preceding this offer, been notified of any delinquent Federal taxes in an amount that exceeds \$3,000 for which the liability remains unsatisfied.

(i) Taxes are considered delinquent if both of the following criteria apply:

(A) *The tax liability is finally determined*. The liability is finally determined if it has been assessed. A liability is not finally determined if there is a pending administrative or judicial challenge. In the case of a judicial challenge to the liability, the liability is not finally determined until all judicial appeal rights have been exhausted.

(B) *The taxpayer is delinquent in making payment*. A taxpayer is delinquent if the taxpayer has failed to pay the tax liability when full payment was due and required. A taxpayer is not delinquent in cases where enforced collection action is precluded.

(ii) *Examples.* (A) The taxpayer has received a statutory notice of deficiency, under I.R.C. §6212, which entitles the taxpayer to seek Tax Court review of a proposed tax deficiency. This is not a delinquent tax because it is not a final tax liability. Should the taxpayer seek Tax Court review, this will not be a final tax liability until the taxpayer has exercised all judicial appeal rights.

(B) The IRS has filed a notice of Federal tax lien with respect to an assessed tax liability, and the taxpayer has been issued a notice under I.R.C. §6320 entitling the taxpayer to request a hearing with the IRS Office of Appeals contesting the lien filing, and to further appeal to the Tax Court if the IRS determines to sustain the lien filing. In the course of the hearing, the taxpayer is entitled to contest the underlying tax liability because the taxpayer has had no prior opportunity to contest the liability. This is not a delinquent tax because it is not a final tax liability. Should the taxpayer seek tax court review, this will not be a final tax liability until the taxpayer has exercised all judicial appeal rights.

(C) The taxpayer has entered into an installment agreement pursuant to I.R.C. §6159. The taxpayer is making timely payments and is in full compliance with the agreement terms. The taxpayer is not delinquent because the taxpayer is not currently required to make full payment.

(D) The taxpayer has filed for bankruptcy protection. The taxpayer is not delinquent because enforced collection action is stayed under 11 U.S.C. §362 (the Bankruptcy Code).

*(i) Certification Regarding Knowledge of Child Labor for Listed End Products (Executive Order 13126). [The Contracting Officer must list in paragraph (i)(1) any end products being acquired under this solicitation that are included in the List of Products Requiring Contractor Certification as to Forced or Indentured Child Labor, unless excluded at 22.1503(b).]*

(1) Listed End Product

Listed End Product

Listed Countries of Origin:

N/A

*(2) Certification. [If the Contracting Officer has identified end products and countries of origin in paragraph (i)(1) of this provision, then the offeror must certify to either (i)(2)(i) or (i)(2)(ii) by checking the appropriate block.]*

☐ (i) The offeror will not supply any end product listed in paragraph (i)(1) of this provision that was mined, produced, or manufactured in the corresponding country as listed for that product.

☐ (ii) The offeror may supply an end product listed in paragraph (i)(1) of this provision that was mined, produced, or manufactured in the corresponding country as listed for that product. The offeror certifies that it has made a good faith effort to determine whether forced or indentured child labor was used to mine, produce, or manufacture any such end product furnished under this contract. On the basis of those efforts, the offeror certifies that it is not aware of any such use of child labor.

*(j) Place of manufacture.* (Does not apply unless the solicitation is predominantly for the acquisition of manufactured end products.) For statistical purposes only, the offeror shall indicate whether the place of manufacture of the end products it expects to provide in response to this solicitation is predominantly-

(1) ☐ In the United States (Check this box if the total anticipated price of offered end products manufactured in the United States exceeds the total anticipated price of offered end products manufactured outside the United States); or

(2) ☐ Outside the United States.

*(k) Certificates regarding exemptions from the application of the Service Contract Act.* (Certification by the offeror as to its compliance with respect to the contract also constitutes its certification as to compliance by its subcontractor if it subcontracts out the exempt services.) *[The contracting officer is to check a box to indicate if paragraph (k)(1) or (k)(2) applies.]*

☐ (1) Maintenance, calibration, or repair of certain equipment as described in FAR 22.1003-4(c)(1). The offeror ☐ does ☐ does not certify that-

- (i) The items of equipment to be serviced under this contract are used regularly for other than Governmental purposes and are sold or traded by the offeror in substantial quantities to the general public in the course of normal business operations;
- (ii) The services will be furnished at prices which are, or are based on, established catalog or market prices (see FAR 22.1003-4(c)(2)(ii)) for the maintenance, calibration, or repair of such equipment; and
- (iii) The compensation (wage and fringe benefits) plan for all service employees performing work under the contract will be the same as that used for these employees and equivalent employees servicing the same equipment of commercial customers.
- [ ] (2) Certain services as described in FAR 22.1003-4(d)(1). The offeror ☐ does ☐ does not certify that-
- (i) The services under the contract are offered and sold regularly to non-Governmental customers, and are provided by the offeror (or subcontractor in the case of an exempt subcontract) to the general public in substantial quantities in the course of normal business operations;
- (ii) The contract services will be furnished at prices that are, or are based on, established catalog or market prices (see FAR 22.1003-4(d)(2)(iii));
- (iii) Each service employee who will perform the services under the contract will spend only a small portion of his or her time (a monthly average of less than 20 percent of the available hours on an annualized basis, or less than 20 percent of available hours during the contract period if the contract period is less than a month) servicing the Government contract; and
- (iv) The compensation (wage and fringe benefits) plan for all service employees performing work under the contract is the same as that used for these employees and equivalent employees servicing commercial customers.
- (3) If paragraph (k)(1) or (k)(2) of this clause applies-
- (i) If the offeror does not certify to the conditions in paragraph (k)(1) or (k)(2) and the Contracting Officer did not attach a Service Contract Act wage determination to the solicitation, the offeror shall notify the Contracting Officer as soon as possible; and
- (ii) The Contracting Officer may not make an award to the offeror if the offeror fails to execute the certification in paragraph (k)(1) or (k)(2) of this clause or to contact the Contracting Officer as required in paragraph (k)(3)(i) of this clause.
- (1) *Taxpayer Identification Number (TIN)* (26 U.S.C. 6109, 31 U.S.C. 7701). (Not applicable if the offeror is required to provide this information to a central contractor registration database to be eligible for award.)
- (1) All offerors must submit the information required in paragraphs (l)(3) through (l)(5) of this provision to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325(d), reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M, and implementing regulations issued by the Internal Revenue Service (IRS).
- (2) The TIN may be used by the Government to collect and report on any delinquent amounts arising out of the offeror's relationship with the Government (31 U.S.C. 7701(C)(3)). If the resulting contract is subject to the payment reporting requirements described in FAR 4.904, the TIN provided hereunder may be matched with IRS records to verify the accuracy of the offeror's TIN.
- (3) Taxpayer Identification Number (TIN).
- ☐ TIN: \_\_\_\_\_.
- ☐ TIN has been applied for.
- ☐ TIN is not required because:
- ☐ Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the United States and does not have an office or place of business or a fiscal paying agent in the United States;
- ☐ Offeror is an agency or instrumentality of a foreign government;
- ☐ Offeror is an agency or instrumentality of the Federal Government.
- (4) Type of organization.
- ☐ Sole proprietorship;

- ☐ Partnership;
- ☐ Corporate entity (not tax-exempt);
- ☐ Corporate entity (tax-exempt);
- ☐ Government entity (Federal, State, or local);
- ☐ Foreign government;
- ☐ International organization per 26 CFR 1.6049-4;
- ☐ Other \_\_\_\_\_.

(5) Common parent.

- ☐ Offeror is not owned or controlled by a common parent;
- ☐ Name and TIN of common parent:

Name \_\_\_\_\_.

TIN \_\_\_\_\_.

(m) Restricted business operations in Sudan. By submission of its offer, the offeror certifies that it does not conduct any restricted business operations in Sudan.

#### **52.225-2 – BUY AMERICAN ACT CERTIFICATE (Jun 2003)**

(a) The offeror certifies that each end product, except those listed in paragraph (b) of this provision, is a domestic end product and that the offeror has considered components of unknown origin to have been mined, produced, or manufactured outside the United States. The offeror shall list as foreign end products those end products manufactured in the United States that do not qualify as domestic end products. The terms “component,” “domestic end product,” “end product,” “foreign end product,” and “United States” are defined in the clause of this solicitation entitled “Buy American Act-Supplies.”

(b) Foreign End Products:

Line Item No.:	Country of Origin:
_____	_____
_____	_____

*[List as necessary]*

(c) The Government will evaluate offers in accordance with the policies and procedures of Part 25 of the Federal Acquisition Regulation.

#### **52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (Feb 1998)**

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these address(es): Federal Acquisition Regulation (FAR) clauses: <http://www.acqnet.gov/far/>; NASA FAR Supplement (NFS) clauses: <http://www.hq.nasa.gov/office/procurement/regs/nfstoc.htm>



**A. FEDERAL ACQUISITION REGULATION (FAR) (48CFR CHAPTER 1) PROVISIONS:**

The following FAR provisions are included by reference:

- 52.211-14 Notice of Priority Rating for National Defense, Emergency Preparedness, and Energy Program Use (Apr 2008) Fill In: DO-C9  
52.233-2 Service of Protest (Sep 2006) Fill In: (John C. Stennis Space Center, Office of Procurement / DA00, Bldg 1100, Rm 251H, Stennis Space Center, MS 39529-6000)

**B. NASA FEDERAL ACQUISITION REGULATION SUPPLEMENT (48CFR CHAPTER 18) PROVISIONS (<http://www.hq.nasa.gov/office/procurement/regs/nfstoc.htm>):**

The following NFS provisions are included by reference:

- 1852.233-70 Protest to NASA (Oct 2002)

**CONTRACT CLAUSES**

**52.212-4 -- CONTRACT TERMS AND CONDITIONS – COMMERCIAL ITEMS (Feb 2007)**

The following **ADDENDA TO FAR 52.212-4** are incorporated:

**ADDENDUM TO FAR 52.212-4, CONTRACT TERMS AND CONDITIONS - COMMERCIAL ITEMS**

The following paragraphs of this clause are tailored as follows:

(a) Inspection/Acceptance. Add the following:

(a)(1) If the contractor fails to promptly perform the services again, or to take the necessary action to ensure future performance in conformity with contract requirements, the government may, by contract or otherwise, perform the services at contractor's cost.

(a)(2) Inspection and acceptance of the services will be performed at Stennis Space Center, MS, by the A3 Altitude Test Facility Project Office.

(c) *Changes...* Replace with the following: *Changes.* Changes in the terms and conditions of this contract may be made only by written agreement of the parties with the exception of administrative changes such as changes in the paying office, appropriations data, etc., which may be changed unilaterally by the Government.

**52.212-5 -- CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS -- COMMERCIAL ITEMS (Jun 2008)**

(a) The Contractor shall comply with the following Federal Acquisition Regulation (FAR) clauses, which are incorporated in this contract by reference, to implement provisions of law or Executive orders applicable to acquisitions of commercial items:

\_\_\_ (1) 52.233-3, Protest After Award (AUG 1996) (31 U.S.C. 3553).

\_\_\_ (2) 52.233-4, Applicable Law for Breach of Contract Claim (OCT 2004) (Pub. L. 108-77, 108-78).

(b) The Contractor shall comply with the FAR clauses in this paragraph (b) that the contracting officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items: *[Contracting Officer shall check as appropriate.]*

X (1) 52.203-6, Restrictions on Subcontractor Sales to the Government (Sep 2006), with Alternate I (Oct 1995)(41 U.S.C. 253g and 10 U.S.C. 2402).

\_\_\_ (2) 52.219-3, Notice of Total HUBZone Set-Aside (Jan 1999)(15 U.S.C. 657a).

X (3) 52.219-4, Notice of Price Evaluation Preference for HUBZone Small Business Concerns (Jul 2005) (if the offeror elects to waive the preference, it shall so indicate in its offer)(15 U.S.C. 657a).

\_\_\_ (4) [Reserved]

X (5) (i) 52.219-6, Notice of Total Small Business Aside (June 2003) (15 U.S.C. 644).

\_\_\_ (ii) Alternate I (Oct 1995) of 52.219-6.

\_\_\_ (iii) Alternate II (Mar 2004) of 52.219-6.

\_\_\_ (6) (i) 52.219-7, Notice of Partial Small Business Set-Aside (June 2003)(15 U.S.C. 644).

\_\_\_ (ii) Alternate I (Oct 1995) of 52.219-7.

\_\_\_ (iii) Alternate II (Mar 2004) of 52.219-7.

X (7) 52.219-8, Utilization of Small Business Concerns (May 2004) (15 U.S.C. 637(d)(2) and (3)).

\_\_\_ (8) (i) 52.219-9, Small Business Subcontracting Plan (Apr 2008)(15 U.S.C. 637 (d)(4)).

\_\_\_ (ii) Alternate I (Oct 2001) of 52.219-9.

\_\_\_ (iii) Alternate II (Oct 2001) of 52.219-9.

\_\_\_ (9) 52.219-14, Limitations on Subcontracting (Dec 1996)(15 U.S.C. 637(a)(14)).

\_\_\_ (10) 52.219-16, Liquidated Damages - Subcontracting Plan (JAN 1999) (15 U.S.C. 637(d)(4)(F)(i)).

\_\_\_ (11) (i) 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns (Sep 2005)(10 U.S.C. 2323) (if the offeror elects to waive the adjustment, it shall so indicate in its offer).

\_\_\_ (ii) Alternate I (June 2003) of 52.219-23.

\_\_\_ (12) 52.219-25, Small Disadvantaged Business Participation Program-Disadvantaged Status and Reporting (Apr 2008)(Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).

\_\_\_ (13) 52.219-26, Small Disadvantaged Business Participation Program-Incentive Subcontracting (Oct 2000)(Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).

\_\_\_ (14) 52.219-27, Notice of Total Service-Disabled Veteran-Owned Small Business Set-Aside (May 2004).

X (15) 52.219-28, Post Award Small Business Program Representation (June 2007) (15 U.S.C. 632(a)(2)).

X (16) 52.222-3, Convict Labor (June 2003)(E.O. 11755).

X (17) 52.222-19, Child Labor-Cooperation with Authorities and Remedies (Feb 2008) (E.O. 13126).

- X (18) 52.222-21, Prohibition of Segregated Facilities (Feb 1999).
- X (19) 52.222-26, Equal Opportunity (Mar 2007)(E.O. 11246).
- X (20) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (Sept 2006)(38 U.S.C. 4212).
- X (21) 52.222-36, Affirmative Action for Workers with Disabilities (Jun 1998)(29 U.S.C. 793).
- X (22) 52.222-37, Employment Reports on Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (Sept 2006)(38 U.S.C. 4212).
- X (23) 52.222-39, Notification of Employee Rights Concerning Payment of Union Dues or Fees (Dec 2004) (E.O. 13201).
- X (24) (i) 52.222-50, Combating Trafficking in Persons (Aug 2007) (Applies to all contracts).
- \_\_\_ (ii) Alternate I (Aug 2007) of 52.222-50.
- \_\_\_ (25) (i) 52.223-9, Estimate of Percentage of Recovered Material Content for EPA-Designated Items (May 2008)(42 U.S.C. 6962(c)(3)(A)(ii)).
- \_\_\_ (ii) Alternate I (May 2008) of 52.223-9 (42 U.S.C. 6962(i)(2)(C)).
- \_\_\_ (26) 52.223-15, Energy Efficiency in Energy- Consuming Products (Dec 2007) (42 U.S.C. 8259b).
- \_\_\_ (27)(i) 52.223-16, IEEE 1680 Standard for the Environmental Assessment of Personal Computer Products (Dec 2007) (E.O. 13423).
- \_\_\_ (ii) Alternate I (Dec 2007) of 52.223-16.
- X (28) 52.225-1, Buy American Act--Supplies (June 2003)(41 U.S.C. 10a-10d).
- \_\_\_ (29) (i) 52.225-3, Buy American Act --Free Trade Agreements -- Israeli Trade Act (Aug 2007) (41 U.S.C. 10a-10d, 19 U.S.C. 3301 note, 19 U.S.C. 2112 note, Pub. L. 108-77, 108-78, 108-286, 109-53, and 109-169).
- \_\_\_ (ii) Alternate I (Jan 2004) of 52.225-3.
- \_\_\_ (iii) Alternate II (Jan 2004) of 52.225-3.
- \_\_\_ (30) 52.225-5, Trade Agreements (Nov 2007)(19 U.S.C. 2501, *et seq.*, 19 U.S.C. 3301 note).
- X (31) 52.225-13, Restrictions on Certain Foreign Purchases (Jun 2008) (E.O.'s, proclamations, and statutes administered by the Office of Foreign Assets Control of the Department of the Treasury).
- \_\_\_ (32) 52.226-4, Notice of Disaster or Emergency Area Set-Aside (Nov 2007) (42 U.S.C. 5150).
- \_\_\_ (33) 52.226-5, Restrictions on Subcontracting Outside Disaster or Emergency Area (Nov 2007) (42 U.S.C. 5150).
- \_\_\_ (34) 52.232-29, Terms for Financing of Purchases of Commercial Items (Feb 2002)(41 U.S.C. 255(f), 10 U.S.C. 2307(f)).
- \_\_\_ (35) 52.232-30, Installment Payments for Commercial Items (Oct 1995)(41 U.S.C. 255(f), 10 U.S.C. 2307(f)).
- X (36) 52.232-33, Payment by Electronic Funds Transfer-Central Contractor Registration (Oct. 2003)(31 U.S.C. 3332).
- \_\_\_ (37) 52.232-34, Payment by Electronic Funds Transfer-Other Than Central Contractor Registration (May 1999)(31 U.S.C. 3332).
- \_\_\_ (38) 52.232-36, Payment by Third Party (May 1999)(31 U.S.C. 3332).
- \_\_\_ (39) 52.239-1, Privacy or Security Safeguards (Aug 1996)(5 U.S.C. 552a).
- X (40) (i) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (Feb 2006)(46 U.S.C. Appx 1241(b) and 10 U.S.C. 2631).
- \_\_\_ (ii) Alternate I (Apr 2003) of 52.247-64.

(c) The Contractor shall comply with the FAR clauses in this paragraph (c), applicable to commercial services, that the Contracting Officer has indicated as being incorporated in this contract by reference to implement

provisions of law or executive orders applicable to acquisitions of commercial items: [*Contracting Officer check as appropriate.*]

- \_\_\_ (1) 52.222-41, Service Contract Act of 1965 (Nov 2007)(41 U.S.C. 351, *et seq.*).
- \_\_\_ (2) 52.222-42, Statement of Equivalent Rates for Federal Hires (May 1989)(29 U.S.C. 206 and 41 U.S.C. 351, *et seq.*).
- \_\_\_ (3) 52.222-43, Fair Labor Standards Act and Service Contract Act -- Price Adjustment (Multiple Year and Option Contracts) (Nov 2006)(29 U.S.C.206 and 41 U.S.C. 351, *et seq.*).
- \_\_\_ (4) 52.222-44, Fair Labor Standards Act and Service Contract Act -- Price Adjustment (Feb 2002)(29 U.S.C. 206 and 41 U.S.C. 351, *et seq.*).
- \_\_\_ (5) 52.222-51, Exemption from Application of the Service Contract Act to Contracts for Maintenance, Calibration, or Repair of Certain Equipment -- Requirements (Nov 2007) (41 U.S.C. 351, *et seq.*).
- \_\_\_ (6) 52.222-53, Exemption from Application of the Service Contract Act to Contracts for Certain Services - Requirements (Nov 2007) (41 U.S.C. 351, *et seq.*).
- \_\_\_ (7) 52.237-11, Accepting and Dispensing of \$1 Coin (Aug 2007)(31 U.S.C. 5112(p)(1)).

(d) *Comptroller General Examination of Record.* The Contractor shall comply with the provisions of this paragraph (d) if this contract was awarded using other than sealed bid, is in excess of the simplified acquisition threshold, and does not contain the clause at 52.215-2, Audit and Records -- Negotiation.

(1) The Comptroller General of the United States, or an authorized representative of the Comptroller General, shall have access to and right to examine any of the Contractor's directly pertinent records involving transactions related to this contract.

(2) The Contractor shall make available at its offices at all reasonable times the records, materials, and other evidence for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in FAR Subpart 4.7, Contractor Records Retention, of the other clauses of this contract. If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement. Records relating to appeals under the disputes clause or to litigation or the settlement of claims arising under or relating to this contract shall be made available until such appeals, litigation, or claims are finally resolved.

(3) As used in this clause, records include books, documents, accounting procedures and practices, and other data, regardless of type and regardless of form. This does not require the Contractor to create or maintain any record that the Contractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(e)

(1) Notwithstanding the requirements of the clauses in paragraphs (a), (b), (c) and (d) of this clause, the Contractor is not required to flow down any FAR clause, other than those in paragraphs (i) through (vii) of this paragraph in a subcontract for commercial items. Unless otherwise indicated below, the extent of the flow down shall be as required by the clause--

(i) 52.219-8, Utilization of Small Business Concerns (May 2004)(15 U.S.C. 637(d)(2) and (3)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds \$550,000 (\$1,000,000 for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(ii) 52.222-26, Equal Opportunity (Mar 2007)(E.O. 11246).

(iii) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (Sept 2006)(38 U.S.C. 4212).

(iv) 52.222-36, Affirmative Action for Workers with Disabilities (June 1998)(29 U.S.C. 793).

(v) 52.222-39, Notification of Employee rights Concerning Payment of Union Dues or Fees (Dec 2004) (E.O. 13201).

- (vi) 52.222-41, Service Contract Act of 1965 (Nov 2007), flow down required for all subcontracts subject to the Service Contract Act of 1965 (41 U.S.C. 351, *et seq.*)
- (vii) 52.222-50, Combating Trafficking in Persons (Aug 2007) (22 U.S.C. 7104(g)). Flow down required in accordance with paragraph (f) of FAR clause 52.222-50.
- (viii) 52.222-51, Exemption from Application of the Service Contract Act to Contracts for Maintenance, Calibration, or Repair of Certain Equipment-Requirements (Nov 2007) (41 U.S.C. 351, *et seq.*).
- (ix) 52.222-53, Exemption from Application of the Service Contract Act to Contracts for Certain Services- Requirements (Nov 2007) (41 U.S.C. 351, *et seq.*).
- (x) 52.247-64, Preference for Privately-Owned U.S. Flag Commercial Vessels (Feb 2006)(46 U.S.C. Appx 1241(b) and 10 U.S.C. 2631). Flow down required in accordance with paragraph (d) of FAR clause 52.247-64,

(2) While not required, the contractor may include in its subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligations.

## **52.252-2 CLAUSES INCORPORATED BY REFERENCE (Feb 1998)**

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es): Federal Acquisition Regulation (FAR) clauses: <http://www.acqnet.gov/far/>; NASA FAR Supplement (NFS) clauses: <http://www.hq.nasa.gov/office/procurement/regs/nfstoc.htm>

### **A. FEDERAL ACQUISITION REGULATION (48CFR CHAPTER 1) CLAUSES (<http://www.acqnet.gov/far/>):**

The following clauses are included by reference:

- 52.204-7 Central Contractor Registration (Apr 2008)
- 52.209-6 Protecting the Government's Interest When Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment. (Sep 2006)
- 52.211-15 Defense Priority and Allocation Requirement (Apr 2008)
- 52.225-8 Duty-Free Entry. (Feb 2000) Fill In: (g)(4) [NASA's John C. Stennis Space Center, MS, from Tariff Schedules, SSC Office of Procurement / DA00]
- 52.246-2 Inspection of Supplies – Fixed Price (Aug 1996)
- 52.247-34 F.O.B. Destination (Nov 1991)

### **B. NASA FEDERAL ACQUISITION REGULATION SUPPLEMENT (48CFR CHAPTER 18) CLAUSES (<http://www.hq.nasa.gov/office/procurement/regs/nfstoc.htm>)**

The following clauses are included by reference:

- 1852.215-84 Ombudsman (Oct 2003) Fill In: b. [Patrick Scheuermann, Deputy Director, John C. Stennis Space Center, MS 39529-6000, E-Mail [Patrick.e.scheuermann@nasa.gov](mailto:Patrick.e.scheuermann@nasa.gov), Phone (228) 688-1128, or Fax (228) 688-3240.]
- 1852.219-76 NASA 8 Percent Goal (Jul 1997)
- 1852.223-72 Safety and Health (Short Form) (Apr 2002)
- 1852.223-75 Major Breach Safety & Security (Feb 2002); Alternate I (Feb 2006)
- 1852.225-70 Export Licenses (Feb 2000) Fill In: John C. Stennis Space Center, MS

### **1852.237-72 ACCESS TO SENSITIVE INFORMATION (Jun 2005)**

(a) As used in this clause, “sensitive information” refers to information that a contractor has developed at private expense, or that the Government has generated that qualifies for an exception to the Freedom of Information Act,

which is not currently in the public domain, and which may embody trade secrets or commercial or financial information, and which may be sensitive or privileged.

(b) To assist NASA in accomplishing management activities and administrative functions, the Contractor shall provide the services specified elsewhere in this contract.

(c) If performing this contract entails access to sensitive information, as defined above, the Contractor agrees to -

(1) Utilize any sensitive information coming into its possession only for the purposes of performing the services specified in this contract, and not to improve its own competitive position in another procurement.

(2) Safeguard sensitive information coming into its possession from unauthorized use and disclosure.

(3) Allow access to sensitive information only to those employees that need it to perform services under this contract.

(4) Preclude access and disclosure of sensitive information to persons and entities outside of the Contractor's organization.

(5) Train employees who may require access to sensitive information about their obligations to utilize it only to perform the services specified in this contract and to safeguard it from unauthorized use and disclosure.

(6) Obtain a written affirmation from each employee that he/she has received and will comply with training on the authorized uses and mandatory protections of sensitive information needed in performing this contract.

(7) Administer a monitoring process to ensure that employees comply with all reasonable security procedures, report any breaches to the Contracting Officer, and implement any necessary corrective actions.

(d) The Contractor will comply with all procedures and obligations specified in its Organizational Conflicts of Interest Avoidance Plan, which this contract incorporates as a compliance document.

(e) The nature of the work on this contract may subject the Contractor and its employees to a variety of laws and regulations relating to ethics, conflicts of interest, corruption, and other criminal or civil matters relating to the award and administration of government contracts. Recognizing that this contract establishes a high standard of accountability and trust, the Government will carefully review the Contractor's performance in relation to the mandates and restrictions found in these laws and regulations. Unauthorized uses or disclosures of sensitive information may result in termination of this contract for default, or in debarment of the Contractor for serious misconduct affecting present responsibility as a government contractor.

(f) The Contractor shall include the substance of this clause, including this paragraph (f), suitably modified to reflect the relationship of the parties, in all subcontracts that may involve access to sensitive information

## **LIST OF ATTACHMENTS**

The following documents are attached hereto and made a part of this contract:

Attachment 1	High Pressure Industrial Water Rubber-Seated Butterfly Valves, Specification No. 11J00-GM04, Rev 2	March, 2008
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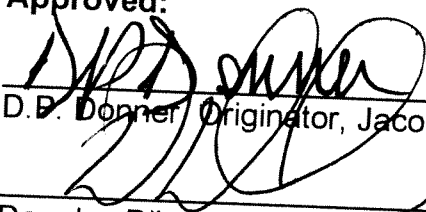
PROCUREMENT SPECIFICATION  
for  
HIGH PRESSURE INDUSTRIAL WATER  
RUBBER-SEATED BUTTERFLY VALVES

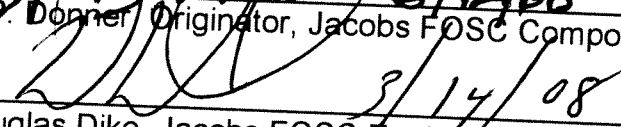
Specification No. 11J00-GM04  
March, 2008  
Revision 2

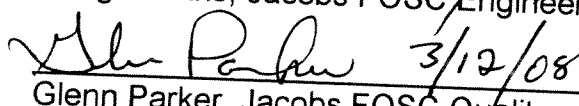
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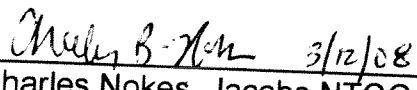
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION  
JOHN C. STENNIS SPACE CENTER  
STENNIS SPACE CENTER, MS 36529

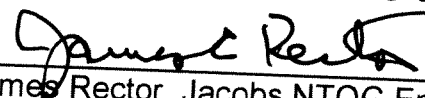
Approved:

 3/12/08  
D.P. Donner, Originator, Jacobs FOSC Component Engineering

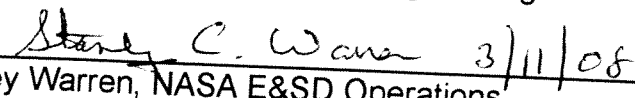
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Douglas Dike, Jacobs FOSC Engineering

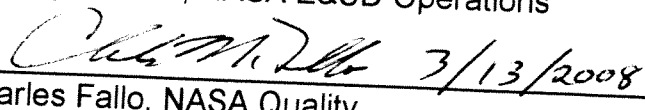
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Glenn Parker, Jacobs FOSC Quality

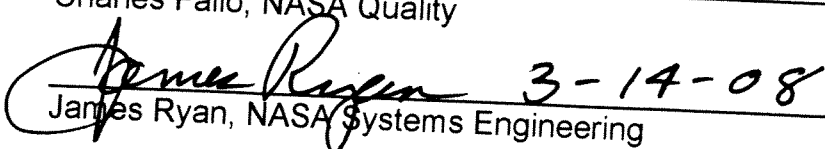
 3/12/08  
Charles Nokes, Jacobs NTOG Operations

  
James Rector, Jacobs NTOG Engineering

 3/12/08  
Jonathon Dickey, NASA E&SD Engineering

 3/11/08  
Stanley Warren, NASA E&SD Operations

 3/13/2008  
Charles Fallo, NASA Quality

 3-14-08  
James Ryan, NASA Systems Engineering

## 1.0 SCOPE

This specification covers requirements for rubber-seated butterfly valves with flanged end body patterns used in the High Pressure Industrial Water System at Stennis Space Center, MS.

The Government reserves the right to witness and/or inspect any aspect of the fabrication, inspection, painting, and/or testing of the components specified in this document.

Valves shall meet the requirements of AWWA C504 (latest revision), "Rubber-Seated Butterfly Valves", unless stipulated otherwise in this specification. Where there is a conflict between this specification and AWWA C504, this specification shall govern.

## 2.0 APPLICABLE DOCUMENTS

In their latest edition, AWWA C504 and its "References" form a part of this specification to the extent used. The following documents, not referenced in AWWA C504, are also considered a part of this specification. In any case of conflict, the requirements of this specification shall prevail.

MSS SP-6 - Standard Finishes for Contact Faces of Pipe Flanges and Connecting-End Flanges of Valves and Fittings

NSF/ANSI 61 - Drinking Water System Components – Health Effects

## 3.0 DESIGN

### 3.1 GENERAL

The individual data sheets in Section 14.0 specify valve quantity, size, pressure requirements, end-to-end dimensions, etc. required by this procurement.

Valves shall be of the motor actuated, tight closing, rubber seated type with bi-directional flow capability and drop-tight shutoff at design pressure in either flow direction. Valves shall be satisfactory for applications requiring valve actuation after long periods of inactivity. Valve disc shall rotate 90° from the full open position to the tight shut position.

The valve disc shall be designed to minimize line turbulence and head loss. The disc shall have no hollow chambers that can entrap water. A flow through disc design is preferred.



The valve stuffing box shall be designed for V-ring type packing and sized to allow adjustment or complete replacement of the packing without removal of the actuator. An enclosure shall be provided that prevents outside contaminants from entering the stuffing box.

The valve seat shall be field adjustable around the full 360° circumference. The design shall allow replacement of the rubber seat without dismantling the actuator, disc or shaft, and without removal of the valve from the pipeline.

Valves shall be electric motor actuated (see section 5.0) and equipped with an industrial quality stem position pointer and position indicator to provide visual indication of the valve disc position at all points between full open and full closed.

Bypass connections are not required. The Government has provided a 12" bypass valve piped external to the valves procured by this specification.

Valves shall be designed and fabricated to operate in ambient outdoor environment with temperatures ranging from 20°F to 120°F and with relative humidity as high as 100%.

Valves shall be designed for vertical mounting in a horizontal line. Suitable supports shall be provided on the valve body for mounting the valve on a concrete foundation.

For all valve end connection flanges, and all blind and/or bell flanges used in testing, the flange face area that comes in contact with a gasket upon flange assembly shall have serrations in accordance with MSS SP-6.

Valves weighing more than 100 lbs. shall be supplied with lifting lugs attached in such a way that when supported by the lugs the valve is in an upright position with the actuator positioned directly above the main valve body. These attachment points shall also be capable of supporting the valve during installation.

All thread patterns, fasteners, seals and wrench flats on valve assemblies shall be sized in fractional inches. No metric sizes are permitted.

Prior to beginning fabrication, fabrication drawings depicting the proposed valve design including the materials of construction shall be submitted to NASA for review to ensure compliance with this specification. Additionally, fabrication drawings shall be submitted to NASA for review and approval whenever the contractor makes or proposes to make any modification to the valve design.

Final "as-built" detail drawings are required as part of the final submittal package. Fabrication and final "as-built" drawings shall include the following:

- A detailed cutaway scaled depiction of the valve and actuator, showing principal dimensions and identifying all piece parts by description and part number. The material(s) of construction of each piece part, including its generic description and applicable specification, shall also be included. The actuator drawing shall also include a description of all ancillary parts of the valve actuator (i.e., limit switches, electrical connections, etc.) including their applicable part numbers and commercial specifications.
- End connection details, i.e., flange thickness, inside diameter, outside diameter, size & number of bolt holes, and bolt circle diameter.
- Proof pressure, design pressure, operating temperature range, serial number, model number, full open Cv and weight of each valve and its actuator.
- An overall external envelope drawing of the valve (including the actuator and ancillary parts) depicting the external envelope dimensions.
- The location and type of attachment points for external support and handling of the valve assembly (including the actuator).
- The location and type of supports for valve mounting/installation.

### 3.2 MATERIALS

Certified Material Test Reports (CMTR's) shall be provided for all metallic pressure retaining materials, including those used for the body, disc, and shaft(s). Traceable pour numbers shall be provided for all castings used on pressure retaining parts.

The body shall be ASTM A395 or ASTM A536 ductile iron, or an approved equal.

The disc shall be cast from ASTM A395 or ASTM A536 ductile iron, or an approved equal, and have a stainless steel seating edge.

The valve shaft(s) shall be turned, ground and polished, and constructed of ASTM A276 Type 304 stainless steel, or an approved equal.

#### 4.0 FABRICATION AND ASSEMBLY

##### 4.1 GENERAL

The fabrication and assembly of the valves, when not otherwise specified, shall be in accordance with the requirements of ANSI/AWWA C504.

NASA or their designee shall be notified no less than ten (10) business days prior to assembly of the components. The government reserves the right to inspect any or all component piece parts for cleanliness and workmanship prior to assembly. The government reserves the right to witness any portion or all of the assembly operations.

##### 4.2 NONDESTRUCTIVE EXAMINATION

Personnel performing NDE (non-destructive examination) inspections shall be qualified per ASNT-TC-1A, Level II or III. Applicable NDE procedures and personnel certifications shall be submitted for review by NASA.

The vendor's Quality Control Manual shall be submitted to NASA for review. This manual shall include the vendor's written practice for the qualification and certification of NDE personnel, method and procedure for each type of examination, and discrepant item notification to NASA.

All inspection records shall be maintained and available for review by NASA at any time. In the event of a dispute regarding interpretation of NDE results, Stennis Space Center's ASNT Level III shall have final approval.

##### 4.3 WELDING

All welding operations shall be performed per ASME Boiler and Pressure Vessel Code (BPV) Section VIII, Div. 1 with welders/welding operators and procedures certified per ASME Section IX. Inspection shall be per ASME Section V with acceptance criteria per ASME Section VIII, Div. 1.

Prior to fabrication, the vendor shall submit all supporting documentation for the intended welding procedures, procedure qualification records, and personnel qualification records for review by NASA.

#### 4.4 WELDING INSPECTION

All pressure retaining butt welds accessible to radiographic inspection shall be 100% radiographically inspected in accordance with all applicable ASME BPV Code, Section VIII, Div. 1, and Section V requirements. The root and cover pass of all pressure retaining weldments not accessible to radiographic inspection shall be 100% magnetic particle inspected in accordance with ASME BPV Code, Section VIII, Div. 1, and Section V requirements.

#### 4.5 MARKING

Each valve body shall have a permanently attached stainless steel nameplate stamped with the following information:

- Manufacturer
- Valve Class
- Year of manufacture
- Model No.
- Nominal Size
- Pressure Rating
- Temperature Rating
- Full Open Cv
- Serial No.
- Proof Test Pressure & Date
- Weight (including actuator)

#### 5.0 VALVE ACTUATOR

The valve actuator shall be an electric motor driven type designed to hold the valve in the full open or closed position without valve disc creep or flutter. The actuator unit shall be valve mounted and consist of an electric motor, reducing gear(s), integral controller, limit and torque switches, motor starter, position indicators, and an auxiliary handwheel for manual operation. The unit shall be designed with a "hammer-blow" feature which allows the motor to reach full speed before the load is engaged in both the opening and closing directions. The entire unit will be installed outdoors and must be weatherproof enclosed. The actuator unit shall be responsive to the manually-operated handwheel at all times except when being electrically operated. The handwheel shall not rotate during electrical operation, nor shall the motor rotate during manual operation. A fused motor shall not prevent manual operation. The valve actuator shall also have the ability for the motor to be mechanically disengaged by a hand lever while still being electrically connected. The motor shall be an asynchronous AC, 3 phase, high torque, ball bearing, totally enclosed, class B (or class F) insulated motor and shall have a maximum torque output at least twice as great as the design requirement. Power shall be 480 volt, 60 cycle, 3 phase. Reduction

gearing shall conform to the standards of AGMA for class 5 service. Worm gear shall be alloy bronze and helical gears shall be heat treated steel. All gearing shall be enclosed in a cast iron housing, shall run in a lubricant bath, and ball or roller bearings shall be used throughout. The torque switches shall have provision for adjusting the amount of torque exerted on the valve disc during both opening and closing. The control cabinet shall be NEMA 4 construction and be integrally mounted on the controller. The cabinet cover shall contain open-stop-close switches, "fully-open" green light, and "fully-closed" red light. Both lights shall be on during intermediate positions. The control switches shall be provided with accommodation for limited access (keyed enclosure, padlock security, etc.). All devices shall be factory wired and installed to terminal blocks within the enclosure(s).

## 6.0 CLEANING

All surfaces contacted by the process fluid shall be in a "commercially clean" condition prior to assembly and testing.

"Commercially clean" is defined as visually free of loose slag, water, rust, grit or other foreign particles and containing no visual sign of oil, grease or hydrocarbons.

## 7.0 PAINTING

NASA or their designee shall be notified no less than ten (10) business days prior to start of painting. The government reserves the right to witness any or all of the surface preparation, painting and inspection/testing requirements specified herein.

The paint shall be certified in accordance with NSF/ANSI 61.

The valve shall be painted interior and exterior with Series N140 Pota-Pox Plus Tnemec epoxy, in accordance with AWWA C550 (including verification of a special, electrically void-free coating by holiday testing) and the paint manufacturer's requirements as follows:

- Surface Preparation: Abrasive blast to remove all loose annealing oxides, rust and contaminants; create a minimum surface profile of 1.5 mils.
- Primer: Tnemec Series N140 Pota-Pox Plus @ 6.0 - 8.0 mils dry film thickness (DFT).
- Intermediate: Tnemec Series N140 Pota-pox Plus @ 6.0 - 8.0 mils DFT.
- Finish: Tnemec Series N140 Pota-pox Plus @ 6.0 - 8.0 mils DFT.
- Minimum final DFT: 18.0 mils
- Final color shall be Gray or Black.

## 8.0 TESTING

NASA or their designee shall be notified no less than ten (10) business days prior to start of testing. The government reserves the right to witness any or all of the tests specified herein.

### 8.1 CYCLING TEST

Prior to installing blind flanges or bell flanges, a cycling test shall be performed as follows:

The motor actuator will be wired and energized for electrical operation, and the limit and torque switches will be adjusted per manufacturer's requirements. The valve shall then be successfully positioned full open and full closed a minimum of five (5) times by electric motor actuation. Time required to actuate the valve from full open to full closed by electric motor actuation shall be recorded.

The valve shall then be successfully positioned full open and full closed a minimum of two (2) times by manual handwheel actuation. Number of handwheel turns required to actuate the valve from full open to full closed by manual actuation shall be recorded.

The valve shall operate smoothly and satisfactorily, or shall be adjusted to the satisfaction of the government inspector. Satisfactory limit and torque switch operation shall be verified. Results of the cycling test shall be recorded.

For the following tests, valve end connections shall be blanked for testing with mating blind flanges or bell flanges compatible with and specifically intended for such applications, to verify sealing capabilities under test conditions.

All air must be evacuated from the valve cavity before performing the following tests.

### 8.2 HYDROSTATIC PROOF TEST

Each valve body and associated pressure containing parts shall be subjected to a hydrostatic proof test to ascertain that pressure containment capabilities of the valve comply with design requirements.

With the valve positioned approximately 50% open, a test pressure equal to 2 times the specified design pressure shall be applied.

The proof test pressure shall be held for a minimum of 1 hour. Failure, leakage, or non-elastic deformation shall result in rejection of the valve under test.

### 8.3 EXTERNAL LEAKAGE TEST

Each valve shall be subjected to an external leakage test as follows:

With the valve positioned approximately 50% open, a hydrostatic test pressure equal to the specified design pressure shall be applied. The valve shall then be successfully positioned full open and full closed a minimum of five (5) times by normal actuating means. The final valve position should be approximately 50% open. During actuation, the valve shall operate smoothly and satisfactorily, or shall be adjusted to operate to the satisfaction of the government inspector.

A visual inspection shall be made of all external surfaces, mechanical joints, packing glands, etc. Any visual evidence of external leakage, except for non-repetitive release of air from stem packing and/or seals due to initial loading, shall result in rejection of the valve under test.

### 8.4 INTERNAL LEAKAGE TEST

Each valve shall be subjected to an internal (seat) leakage test. This test shall be performed for each potential flow direction of the valve.

The valve shall be fully closed by the normal actuating means while the body is subjected to an internal hydrostatic pressure equal to the specified design pressure. The pressure shall then be released from one end of the valve.

A suitable flow meter or other "approved" apparatus shall be attached to the downstream side of the valve seat to detect and measure leakage.

The valve will be drop-tight during internal leakage testing. Detection of any internal leakage, with the differential pressure applied in either direction across the valve seat, shall result in rejection of the valve under test. The seat leakage test shall be held for a minimum of 30 minutes.

Repeat the above internal leakage test in the opposite flow direction.

## 9.0 MAINTENANCE

Operations and maintenance (O&M) manuals shall be supplied for each valve assembly (including valve actuators and accessories) and shall include instructions for packing adjustment and/or replacement; instructions for rubber seat adjustment and/or replacement; instructions for centering the disc in the body; fastener torque requirements; and any non-standard special tools. The vendor shall provide a complete listing of all non-standard special tools and fixtures required for valve maintenance.

Any special tools, fixtures, or equipment required to maintain or service each valve shall be provided as deliverable hardware with the valve. These items shall be shipped with or prior to shipment of valves delivered under this procurement.

## 10.0 WARRANTY

The vendor shall supply a certificate of conformance with each valve assembly certifying that the valve assembly (including the valve actuator) has met all requirements of this specification.

Each valve assembly furnished under this specification shall be guaranteed against defective materials, design, and workmanship for a period of one year from the date of installation (not to exceed 18 months after receipt of the valves). Upon the receipt of notice from the Government of failure of any part of the guaranteed equipment during the guaranty period, new replacement parts shall be furnished and installed promptly by the supplier at no additional cost to the government. The supplier shall acknowledge his responsibility under these guarantee provisions by letter, stating that the shipment and materials referred to herein are guaranteed and the inclusive dates of the guaranty period.

## 11.0 SUBMITTALS

The following submittals are required as part of this specification:

### Prior to fabrication of each valve:

1. Fabrication drawings, including NDE requirements and hold points.
2. Vendor's Quality Control Manual.
3. Applicable NDE procedures and personnel certifications.
4. Applicable welding procedures, procedure qualification records, and personnel qualification records.
5. Materials of construction that differ from specification requirements.
6. Test procedures; procedures are required for cycling, hydrostatic proof, external leakage and internal (seat) leakage tests.
7. O&M manuals with edits, as required, and special tool and fixture data as specified in section 9.0.



Prior to delivery of each valve:

1. Final "As-Built" drawings as specified in section 3.1.
2. CMTR's, with traceable heat and pour numbers as applicable, in accordance with requirements of section 3.2.
3. Materials of construction that differ from specification requirements.
4. Test reports for electric motor actuation cycle time and number of handwheel turns to manually cycle the valve closed as required by section 8.1.
5. Test reports documenting results of the hydrostatic proof, external leakage, and internal (seat) leakage tests as required by sections 8.2 thru 8.4.
6. O&M manual with final edits, as required, and special tool and fixture data as specified in section 9.0.
7. Certificates of conformance as described in section 10.0.

Unless otherwise specified, the vendor shall ensure that their submittals are received by NASA a minimum of ten (10) business days prior to the start of work governed by the respective submittal.

Three (3) hard copies of each submittal are required; submittals may be submitted in electronic form. Electronic files shall be readable with Microsoft Word, Microsoft Excel, Adobe Acrobat Reader 6.0 or greater.

Final drawing will be submitted on a CD in Autodesk AutoCAD 2007 format.

**12.0 QUALIFICATION OF VALVE MANUFACTURER**

The vendor shall furnish with his bid, certification attesting to a minimum of 5 years in design and manufacturer of valves of similar design with the specific service media identified. Qualification name, phone number and address of 3 references are required. The experience listing shall include a list of valves manufactured, size, location of use, service, and date of manufacture.

**13.0 SHIPPING AND RECEIVING**

The valves shall be direct shipped from the manufacturer to Stennis Space Center. Receiving inspection will be performed prior to acceptance at Stennis Space Center. In-transit damage is cause for rejection.

**14.0 DATA SHEETS**

Individual valve data sheets are on the following pages.

**Valve Data Sheet Number 1**

- Quantity Required: 1 each
- Valve type: Rubber-Seated Butterfly Valve
- Valve size: 96"  
The valve shall have a 96" diameter bore.
- Design Pressure Rating: 300 psig
- Maximum Operating Pressure: 300 psig
- Maximum Full Open Flow Velocity: 16 ft/sec
- Temperature Rating: 20°F to 120°F
- End Connections: 96" Flat Face Flanges with serrated sealing surfaces  
Flange I.D. = 96"; Flange O.D. = 109.25"; Drill 84 each 2.00" diameter bolt holes (for 1¾" diameter studs) on a 105.75" diameter bolt circle – bolt holes to straddle the valve's vertical centerline.
- Face-to-Face Dimension: 48"
- Service Fluid: Industrial water (brackish river water)
- Valve Actuator: Limitorque SMB or approved equal.  
The electric motor actuator shall be sized to open and close the valve under zero differential pressure.